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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.		
10/627,502	07/25/2003	James N. Curti	SALTER P09AUSD3	3264		
20210	7590 01/20/2006		EXAMINER			
DAVIS & BUJOLD, P.L.L.C.			EREZO, D.	EREZO, DARWIN P		
FOURTH FLO 500 N. COMN	JOR MERCIAL STREET	ART UNIT	PAPER NUMBER			
MANCHESTI	ER, NH 03101-1151	3731				
			DATE MAILED, 01/20/2004	DATE MAIL ED. 01/20/2004		

Please find below and/or attached an Office communication concerning this application or proceeding.

,		Application No. Ap		Applicant(s)	pplicant(s)			
Office Action Summary		10/627,502	2	CURTI ET AL.				
		Examiner		Art Unit				
		Darwin P. E		3731				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply								
 Failure to reply within the set or ext 	, FROM THE MAILING DA e under the provisions of 37 CFR 1.13 iling date of this communication. bove, the maximum statutory period wended period for reply will, by statute, er than three months after the mailing	ATE OF THI 36(a). In no ever will apply and will cause the applic	S COMMUNICATION tt, however, may a reply be tim expire SIX (6) MONTHS from to the total to the cation to become ABANDONED	l. ely filed the mailing date of this c O (35 U.S.C. § 133).				
Status								
1) Responsive to comm	nunication(s) filed on 31 O	ctober 2005						
2a) This action is FINAL								
, —	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.							
Disposition of Claims	•							
4)⊠ Claim(s) <u>6-12</u> is/are pending in the application.								
, , , , , , , , , , , , , , , , , , , ,	4a) Of the above claim(s) is/are withdrawn from consideration.							
·	5) Claim(s) is/are allowed.							
· <u> </u>	∑ Claim(s) <u>6-12</u> is/are rejected.							
	Claim(s) is/are objected to.							
8) Claim(s) are s	subject to restriction and/o	r election re	quirement.					
Application Papers	,							
9)☐ The specification is o	biected to by the Examine	r						
•	=		☐ objected to by the E	Examiner.				
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).								
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).								
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.								
Priority under 35 U.S.C. § 11	9							
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).								
a) ☐ All b) ☐ Some *	c)□ None of:							
1. Certified copie	·- <u>-</u> ·-							
2. Certified copies of the priority documents have been received in Application No								
3. Copies of the certified copies of the priority documents have been received in this National Stage								
application from the International Bureau (PCT Rule 17.2(a)).								
* See the attached detailed Office action for a list of the certified copies not received.								
			•					
Attachment(s)	0.000		4 □ 1π4 · · · •	(DTO 440)				
 Notice of References Cited (PT) Notice of Draftsperson's Patent 		•	4) Interview Summary Paper No(s)/Mail Da		•			
	nt(s) (PTO-1449 or PTO/SB/08)		5) Notice of Informal Pa	atent Application (PT	O-152)			

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DETAILED ACTION

Claim Rejections - 35 USC § 112

- The following is a quotation of the second paragraph of 35 U.S.C. 112:
 The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 2. Claim 12 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 12 recites the limitation of "forming at least one lateral opening in the second fixed length hollow prong" to prevent suction from developing at the exhalation gas entrance. However, this limitation is contradictory to the limitation of "integrally forming a second fixed length hollow nasal prong with the hollow body... such that all of the exhalation gas received by the exhalation gas entrance is exhausted solely via the exhalation gas exit". Having a lateral opening will allow the exhausted gas to exit via said opening, as well as the exhalation gas exit. Therefore, the claim is rendered indefinite. In considering the claim on the merits, the Examiner will focus on the limitation of forming at least one lateral opening.

Claim Rejections - 35 USC § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

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4. Claims 6-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 5,335,656 to Bowe et al. and in view of US 5,046,491 to Derrick.

(claims 6, 9 and 12) Bowe teaches a method of manufacturing a nasal cannula comprising the steps of: providing a hollow body 10 with a treating gas entrance and an exhalation gas exit at opposed ends (Fig. 1), and separating the body into a separate inhalation manifold 20 and exhalation manifold 22 via a an internal partition 18; integrally forming a first fixed length hollow nasal prong 14 with the hollow body such that all the treating gas supplied to the treating gas entrance is exhausted solely via the treating gas exit of the first nasal prong (there are no other openings); integrally forming a second fixed length hollow nasal prong 16 with the hollow body such that all the treating gas supplied to the treating gas entrance is exhausted solely via the treating gas exit of the first nasal prong (there are no other openings). Bowe is silent with regards to forming a lateral opening in the second prong and sizing said second prong.

Derrick also teaches a method of manufacturing a nasal cannula comprising the steps of: forming an elongated hollow body 10 having a wall 90 within the body defining an inhalation manifold and an exhalation manifold; wherein the exhalation manifold has a first hollow prong 92; wherein the inhalation manifold has a second hollow prong 94; forming an additional lateral opening 110 on the second hollow prong, wherein the opening is substantially adjacent the manifold. Derrick also teaches that the opening 110 is used to maximize or optimize gas flow through the cannulas (col. 8, lines 36-39).

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Furthermore, the optimal size of the opening can be determined through mere experimentation and observation. In addition, since the cannula of Derrick is used to monitor expired gases, it would be inherent to provide a size for the opening that would prevent dilution of the exhaled gas.

(claims 7 and 10) The combination of Bowe/Derrick teaches all the limitations of the claims except for the size of the opening to be about 0.05 – 0.07 of an inch in diameter. However, it would have been obvious to one of ordinary skill in the art at the time the invention was made to arrive at the recited range, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955).

(claims 8 and 11) Derrick teaches the claimed invention except for having a pair of coaxially aligned openings. It would have been obvious to one of ordinary skill in the art at the time the invention was made to include a pair of openings in the invention of Derrick because it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis.*, 193 USPQ 8.

Response to Arguments

5. Applicant's arguments with respect to claims 6-12 have been considered but are most in view of the new ground(s) of rejection.

Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**.

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See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Darwin P. Erezo whose telephone number is (571) 272-4695. The examiner can normally be reached on M-F (7:30-4:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anhtuan T. Nguyen can be reached on (571) 272-4963. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

GLENN K. DAWSON
PRIMARY EXAMINER

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